

IN THE SPECIFICATION

On page 7 of the originally filed application, please replace the paragraph beginning on line 15 with the following:

Referring generally to Figs. 3-5, detailed electrical schematics of an embodiment of the present technique are illustrated. In the illustrated embodiment, motor 12 and bus power are three-phase AC. The bus power flows through first set of contacts 52 to input terminals 64 of the variable frequency drive ~~unit 16~~ 46. The variable frequency drive 46 produces a variable frequency output at terminals 66 ~~of the variable frequency drive unit 16~~. The variable frequency output of the variable frequency drive ~~unit 16~~ 46 flows to the electric motor 12 through the second set of contacts 54 and terminals 45.

On page 7 of the originally filed application, please replace the paragraph beginning on line 23 with the following:

A control circuit 68 is used to control the application of power to the electric motor 12 in the illustrated embodiment. The control circuit 68 is operable to open bypass contacts 47 when the manual bypass switch 24 is positioned in the "drive" position. Conversely, the control circuit 68 is operable to close bypass contacts 47 when the manual bypass switch [24] is positioned in the "bypass" position. The bypass contacts 47 are controlled by a bypass contactor 70 in the control circuit 68. In this embodiment, the bypass contacts 47 are normally-open contacts of bypass contactor 70, i.e., the bypass contacts 47 are open when the bypass contactor 70 is de-energized and the bypass contacts 47 are closed when the bypass contactor 70 is energized. However, the control circuit 68 may be configured so that normally-closed contacts may be used as bypass contacts.

On page 8 of the originally filed application, please replace the paragraph beginning on line 6 with the following:

The control circuit 68 utilizes auxiliary contacts of the manual bypass switch [24] to control the energizing of the bypass contactor 70. In the illustrated embodiment, the auxiliary contacts of manual bypass switch [24] comprise a plurality of contacts. First auxiliary contacts 72 and second auxiliary contacts 74 are electrically connected in series with the

bypass contactor 70. The first and second auxiliary contacts 72, 74 are open when the manual bypass switch [24] is positioned in the "drive" position to prevent the bypass contactor 70 from being energized. The first and second auxiliary contacts 72, 74 are closed when the manual bypass switch [24] is positioned in the "bypass" position to enable the bypass contactor 70 to be energized. Furthermore, the first auxiliary contacts 72, are early-break contacts, i.e., they are adapted to open as soon as the manual bypass switch [24] is moved from the "bypass" position. The early-break feature ensures that the bypass contactor 70 is de-energized and the bypass contacts 47 open before the first set of contacts 52 and second set of contacts 54 of the manual bypass switch [24] are closed, thereby preventing bus power and the output of the variable frequency drive unit 16 from being connected to the terminal 45 simultaneously. In the illustrated embodiment, in addition to the first and second bypass contacts 72, 74, first contacts 76 of a control relay 78 are electrically connected to the bypass contactor 70. The first contacts 76 of the control relay 78 are closed to enable bypass contactor 70 to be energized when the control relay 78 is energized.

On page 8 of the originally filed application, please replace the paragraph that begins on line 26 with the following:

In the illustrated embodiment, the energizing of the control relay 78 is controlled by a start switch 80, a hand-off-auto selector switch 82, and a stop switch 84. The stop switch 84 is normally-closed and is opened to stop operation of the motor 12. The hand-off-auto selector switch 82 is a three-position switch adapted to establish whether the motor 12 is started automatically (the "auto" position) or if the motor 12 is to be started manually (the "hand" position) when the position of the manual bypass switch [24] is changed from "drive" to "bypass," and vice versa. The control relay 78 is de-energized when the hand-off-auto selector switch 82 is in the "off" position, preventing the motor 12 from being operated by either bypass contactor 70 or the variable frequency output of the variable frequency drive unit 16. The control relay 78 may be energized when the hand-off-auto selector switch 82 is in the "hand" or "auto" positions. The start switch 80 is a momentary switch that is closed to energize the control relay 78 and start operation of the motor 12. Once control relay 78 is energized, the start switch 80 may be released. Control relay contact 86, third auxiliary contact 88, and bypass contactor auxiliary contact 90 cooperate to keep control relay 78 energized after the start switch 80 is released. The third auxiliary contact 88 is closed when the manual bypass

switch is in the "drive" position and the bypass contactor auxiliary contact 90 is closed when the bypass contactor 70 is energized. In the illustrated embodiment, the manual bypass switch [24] has a fourth auxiliary contact 92 to control the energizing of a cooling fan 94 for the variable frequency drive unit 16. When the manual bypass switch [24] is in the "drive" position, the fourth auxiliary contact 92 is closed to enable the fan 94 to be energized, thereby cooling the variable frequency drive unit 16.

On page 10 of the originally filed application, please replace the paragraph beginning on line 24 with the following:

As illustrated in Fig. 3, the first set of contacts 52 and second set of contacts 54 are closed when the manual bypass switch [24] is positioned in the "drive" position. Bus power is coupled through the disconnecting means 22 and first set of contacts 52 to the input terminals 64 of the variable frequency drive unit 16. The variable frequency output of the variable frequency drive unit 16 is coupled from the output terminals 66 of the variable frequency drive unit 16 through the second set of contacts 54 and terminals 45 to the motor 12. First auxiliary contact 72 and second auxiliary contact 74 are open, preventing bypass contactor 70 from being energized. Consequently, bypass contacts 47 are open.

On page 11 of the originally filed application, please replace the paragraph beginning on line 13 with the following:

As illustrated in Fig. 5, the manual bypass switch [24] is in the process of being repositioned from the "bypass" position to the "drive" position. First set of contacts 52 and second set of contacts 54 are open, isolating the input terminals 64 and output terminals 66 of the variable frequency drive unit 16 from bus power. During the first few degrees of rotation of manual bypass switch [24], early-break auxiliary contact 72 opens. This assures bypass contacts 47 are open before first set of contacts 52 and second set of contacts 54 are closed. No power is applied to the motor 12 by either the variable frequency drive unit 16 or the bypass contactor 70 in this transitional condition. This protects the motor 12, the motor controller 14, and the variable frequency drive unit 16 from the possibility of connecting the outputs of two different controllers to each other at the terminal 45, especially outputs having markedly different frequencies.